(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 13 January 2005 (13.01.2005)

PCT

(10) International Publication Number WO 2005/003199 A1

(51) International Patent Classification⁷: C08L 43/04, C08K 5/54, C08L 83/04

C08F 230/08.

Marvin, Jr. [US/US]; 856 Mohill Place, Piscataway, NJ 08854 (US).

(21) International Application Number:

PCT/US2004/019910

(22) International Filing Date: 22 June 2004 (22.06.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/483,269

25 June 2003 (25.06.2003) US

- (71) Applicant (for all designated States except US): UNION CARBIDE CHEMICALS & PLASTICS TECHNOL-OGY CORPORATION [US/US]; 39 Old Ridgebury Road, Danbury, CT 06817-0001 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BISCOGLIO, Michael, B. [US/US]; 164 Nebula Road, Piscataway, NJ 08854 (US). DEVLIN, Kenneth, T. [US/US]; 207 Chatsworth Drive, Somerset, NJ 08873 (US). ESSEGHIR, Mohamed [US/US]; 5 Robin Lane, Monroe Township, NJ 08831 (US). GROSS, Laurence, H. [US/US]; 977 Rector Road, Bridgewater, NJ 08807 (US). MCDANIEL, Donald, L., Jr. [US/US]; 931 Boesel Avenue, Manville, NJ 08835 (US). SHUROTT, Salvatore, F. [US/US]; 189 Stillhouse Road, Freehold, NJ 07728 (US). COATES,

- (74) Agent: HANSBRO, Kevin, R.; The Dow Chemical Company, Intellectual Property, P.O. Box 1967, Midland, MI
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

48641-1967 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MOISTURE CROSSLINKABLE POLYMERIC COMPOSITION CONTAINING SPECIAL ANTIOXIDANTS

(57) Abstract: The present invention is a moisture-crosslinkable polymeric composition comprising (a) a silane-functionalized olefinic polymer, (b) an acidic silanol condensation catalyst, and (c) an antioxidant, not having a tertiary alkyl-substituted aryl or phenolic group, wherein the polymeric composition does not generate a high amount of foul-smelling or combustible gases. Alternatively, the antioxidant is substantially free of substituents vulnerable to dealkylation in the presence of the acidic silanol condensation catalyst and at conventional processing conditions. The invention also includes methods for preparing the moisture-crosslinkable polymeric composition. The moisture-crosslinkable polymeric compositions can be used as a coating and applied over a wire or a cable.

